

**REMARKS**

Applicants thank the Examiner for considering the references cited in the Information Disclosure Statement filed on January 31, 2006. Applicants also thank the Examiner for accepting the drawings and for acknowledging Applicants' claim to priority and receipt of the priority documents.

Claims 1-10 are all the claims pending in the application, of which claims 1 and 5 have been considered. An election was made by telephone on 9/12/2008 to elect Group I, claims 1 and 5. Applicants herein affirm that election. Accordingly, claims 2-4 and 6-9 are withdrawn from consideration as being directed to a non-elected invention.

Applicants have herein added new dependent claim 10 which is supported at least by the first full paragraph on page 19. No new matter has been added.

**I. Formalities**

The Examiner has objected to the abstract because the abstract is only 32 words in length. Applicants have herein submitted a new abstract that is believed to overcome this objection.

The Examiner has also objected to the disclosure for minor informalities. Applicants have amended the specification as suggested by the Examiner.

**II. Claim Rejections - 35 U.S.C. § 103**

Claims 1 and 5 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yudasaka et al. (U.S. Publication No. 2001/001624; hereinafter "Yudasaka") in view of Miley et al. (U.S. Patent 6,171,451; hereinafter "Miley").

The Examiner alleges that Yudasaka discloses a generation chamber and a recovery chamber and that Miley discloses a moistening unit.

Applicants have herein amended claim 1 to recite a moisturizing unit provided in the nanocarbon recovery chamber. Neither of the references teach or fairly suggest such an arrangement.

The nanocarbon manufacturing apparatus of the present invention has a manufacturing chamber, a nanocarbon recovery chamber, and a sprayer. The sprayer is provided at the nanocarbon recovery chamber, and is structured so as to be able to spray liquid to the inside and onto the wall surfaces of the nanocarbon recovery chamber. In this way, the carbon nanohorn aggregates recovered in the nanocarbon recovery chamber can be moistened. Therefore, the carbon nanohorn aggregates recovered in the nanocarbon recovery chamber can be efficiently deposited on the bottom of the nanocarbon recovery chamber, and can be recovered (see present Application, page 8, lines 9 to 12 and page 9, lines 18 to 26).

Thus the nanocarbon manufacturing apparatus of the present invention has the nanocarbon recovery chamber and a manufacturing chamber respectively and may be operated using them continuously. Further, the carbon nanohorn aggregates recovered in the nanocarbon recovery chamber can be moistened. Because only carbon is introduced into the manufacturing chamber, carbon nanohorn may be manufactured that has little impurity.

On the contrary, Yudasaka discloses a process for producing carbon nanotubes and a laser ablation apparatus. However, Yudasaka does not disclose the nanocarbon recovery chamber independent of the manufacturing chamber and a sprayer.

Miley discloses a device for producing fullerenes using the wash down system. The removal of fullerenes from the chamber is accomplished with an air-lock/load lock stem 129 (see

column 10, lines 31 to 47 of Miley). In other words, Applicants submit that Miley does not disclose a nanocarbon recovery chamber. Further Miley discloses the manufacturing chamber having a system washing out the fullerenes, however Miley does not disclose a moisturizing unit in a nanocarbon recovery chamber. Consequently the device for producing fullerenes must be stopped during washing out the fullerenes.

Because neither of the references discloses or suggests providing a moisturizing unit in a recovery chamber, those skilled in the art would not be lead to modify the combination of Yudasaka and Miley to provide such a feature. Therefore, Applicants submit that claim 1 is patentable over the cited references at least for its recitation that “a moistening unit which moistens generated nanocarbon is provided in said recovery chamber.”

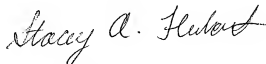
Because claim 5 depends from claim 1, it is submitted that this claim is patentable at least by virtue of its dependency.

### **III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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